

REMARKS

Upon entry of this amendment claims 1-4, 6-8, 10-12, 14-16, 18-20, 22-24, 26-28, 30-32, 34-36, 38-40, 42-44, 46-48, 50-52, 54-56, 58-60, 62, 64, 66-68, 70-72, 74-76, 78-80, 82-84, 86-89, 91-93, 95, 96, 98-111, 113-115, 117-119, 122-124, 127-131, 133, 137-141, 144, and 146-175 remain pending. Claims 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 73, 77, 81, 85, 94, 97, 112, and 116 are canceled. Claims 90, 120, 121, 125, 126, 132, 134-136, 142, 143, and 145 were previously canceled.² Claims 176-205 have been added.

Amendments to the Claims

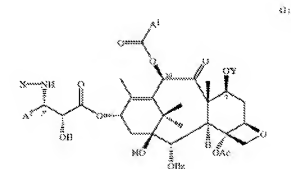
Claims 1, 6, 14, 22, 26, 34, 42, 50, 54, 62, 70, 78, 82, and 91 are amended herein.

Claims 1, 6, 14, 22, 26, 34, 42, 50, 54, 62, 70, 78, and 82 have been amended to substitute the term "hydrido" with the term "hydrogen." The term "hydrido" could be interpreted to mean a negatively charged hydrogen atom which cannot be bonded to another atom. Support for this amendment may be found, for example, in several of the formulae included in applicants' specification, where a missing substituent at a carbon atom means that any unpaired electrons of the carbon atom are paired with the electron from a hydrogen atom, forming a covalent bond. See, e.g., formulae (2), (4), (13), (14) and the specific taxane compounds illustrated in example 1. Paragraphs [0017], [0039], and [0040] of the specification have also been corrected as noted above.

Applicants would like to bring the Examiner's attention to U.S. Pat. Nos. 6,025,385; 6,136,808; and 6,268,381 to Shimizu et al., Abe et al., and Shimizu et al., respectively (each of which are cited in an Information Disclosure Statement being filed

² In the applicants Amendment B dated November 14, 2006, applicants note that the status identifier for claim 86 in the listing of claims was "cancel." In the remarks section, however, claim 132 was the only claim recited as being canceled. Furthermore, the remarks section lists claim 86 as among the claims pending and under consideration upon entry of the Amendment B. Thus, applicants submit that the "cancel" status identifier for claim 86 in the Amendment B listing of claims was inadvertent, and have corrected its status identifier as "original" herein.

concurrently herewith).³ In particular, these references disclose taxanes having a carbamate substituent, piperidine-COO- or piperazine-COO-, at the C(10) position wherein the piperidine or piperazine ring is bonded to the carbonyl carbon via a ring nitrogen atom.⁴



[wherein, A¹ represents a group



(in which R¹ represents a hydrogen atom, or a substituted or unsubstituted alkyl group) or a group



(in which R² represents an amino group, a mono- or di-alkylamino group, a piperidino group, a pyrrolidino group or a morpholino group, X represents a hydrogen atom, an alkoxy-carbonyl group, an alkanoyl group which may be substituted with a fluorine atom, an alkenoyl group, a thienyl-carbonyl group, to a furyl group or a benzoyl group, Y represents a hydrogen atom or a trialkylsilyl group, A² represents a furyl group, an alkylfuryl group, an alkyl group or a fluorenyl group, Ac stands for an acetyl group, and Bz stands for a benzoyl group) or a salt thereof.

The present application and claims are clearly directed to C(10) ester substituted compounds. To be a C(10) ester, the atom in the alpha position relative to the carbonyl carbon of R_{10a}COO- is necessarily a carbon atom. When R_{10a} is heterocyclo, this means that the ring atom bonded to the carbonyl carbon must also be a carbon atom.

³ Applicants note that the foreign counterparts of these U.S. patents, WO 98/02426, WO 99/14209, and WO 99/32473, were previously cited in the Information Disclosure Statement filed on January 22, 2004 (see Cite Nos. 50, 52, and 53).

⁴ See, e.g., U.S. Pat. No. 6,268,381 to Shimizu et al., col. 2, lines 1-41.

Because applicants' definition of heterocyclo is sufficiently broad to permit the alpha atom to be carbon or a heteroatom, the claims have been amended to require that the heterocyclo moiety be linked to the carbonyl carbon of R₁₀ by means of a ring carbon atom. Support for this amendment is found, for example, in the applicants' published application at paragraph [0007] ("In general, these taxanes possess an ester substituent ... at C-10, a hydroxy substituent at C-7 and a range of C-3' substituents."), in the definition of heterocyclo found at paragraph [0080] ("The heterocyclo group preferably has 1 or 2 oxygen atoms, 1 or 2 sulfur atoms, and/or 1 to 4 nitrogen atoms in the ring, and may be bonded to the remainder of the molecule **through a carbon** or heteroatom."(emphasis added)), and in the title of the application ("Taxanes Having a C10 Ester Substituent").

As amended, therefore, claims 1 and 91 require that the R₁₀ substituent be an ester substituent having the formula: R_{10a}COO- and thus do not encompass the C(10) carbamate compounds disclosed by Shimizu et al. and Abe et al.

New Claims

Claims 176-205 have been added. Support for claims 176-181 may be found in the specification, for example, in paragraphs [0017], [0023], [0024], [0025], [0026], [0027], and Examples 2 and 3 of the applicants' published application. Claims 182-205 are directed to certain of the compounds disclosed in Example 2. The table below shows which compounds support claims 182-205:

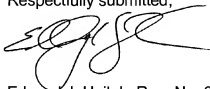
Claim No.	Compounds Supporting Claim
182	3071, 3096, 3102, 3110, 3129, 3163, 3265, 3361, 3370, 3417, 3522, 3535, 3667, 3693, 3853, 3909, 3957, 4051, 4665, 4704, 4711, 4834, 5011, 6522
183	0536, 0549, 0983, 0999, 2269, 2273, 2379, 2380, 5495
184	0550, 0562, 1003, 1011, 2287, 2291, 2392, 2408
185	1892, 1900, 1923, 1939, 2142, 2159, 2164, 2173
186	0663, 0670, 0687, 0691
187	3096, 3370, 3535, 3677, 3693, 4051
188	3053, 3297, 3352, 3425, 3453, 3408
189	0843, 0854, 2781, 2794
190	3102, 3110, 4665, 4704
191	3129, 3163, 3265
192	3494, 3513, 3543, 3588, 3595, 3603, 4329, 4335, 4344
193	3800, 3938, 3945, 3971, 3982, 3994
194	4888, 4919, 4944
195	0908, 0919, 2826, 2838
196	3219, 3222, 4062
197	3132, 3148, 3314
198	3957
199	4711, 4834, 5011
200	3071, 3361, 3909, 3417, 3522, 3853
201	2488, 2499, 2503, 2511
202	3644, 3656, 3663, 3686, 3818, 3866
203	5040
204	3204, 3258
205	6522

CONCLUSION

In light of the foregoing, applicants request entry and allowance of all claims. The Examiner is invited to contact the undersigned attorney should any issue remain unresolved.

The Commissioner is hereby authorized to charge any under payment or credit any over payment to Deposit Account No. 19-1345.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'EJH', with a long horizontal flourish extending to the right.

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